### Target Audience Assessment for a Technical Assistance Program focused on Computer Tools for Planning, Conservation, and Environmental Protection

### Part 1

Report to U.S. EPA – Region 5 for Water Quality Management Planning, Sec. 205(j), 604(b) Grant # C6-96539401-0

Wisconsin Department of Natural Resources in conjunction with the

Midwest Spatial Decision Support Systems Partnership







December 2004

This report was prepared by the Wisconsin Department of Natural Resources under Grant No. C 6 – 96539401-0 from the U.S. Environmental Protection Agency, Region 5. Points of view expressed in this report do not necessarily reflect the views or policies of the U.S. Environmental Protection Agency. Mention of trade names and commercial products does not constitute endorsement of their use.

### **Contacts for Further Information**

Dreux J. Watermolen
Bureau of Integrated Science Services
Wisconsin Department of Natural Resources
101 S. Webster Street
P.O. Box 7921
Madison, WI 53707-7921
(608) 266-8931
dreux.watermolen@dnr.state.wi.us

Dana Lucero
Bureau of Integrated Science Services
Wisconsin Department of Natural Resources
101 S. Webster Street
P.O. Box 7921
Madison, WI 53707-7921
(608) 266-5227
dana.lucero@dnr.state.wi.us

R. Chris Welch
Bureau of Integrated Science Services
Wisconsin Department of Natural Resources
101 S. Webster Street
P.O. Box 7921
Madison, WI 53707-7921
(608) 261-6416
robert.welch@dnr.state.wi.us

### **Background**

In 2003, the Wisconsin Department of Natural Resources (Wisconsin DNR) prepared a concept paper addressing "Environmental Protection through Sound Land Use Decisions: A Federal-State-Local Partnership." That concept paper defined a set of goals and spelled out a technical assistance program focused on computer tools that could be used to achieve those goals. The envisioned partnership involved on-the-ground outreach and assistance through regional sessions that support and enhance community land use decision making. In 2004, the U.S. Environmental Protection Agency (U.S. EPA) awarded a water quality management planning grant to the Wisconsin DNR under this partnership to build capacity and provide technical assistance focused on computer tools for planning, conservation, and environmental protection.

This document describes the results of work undertaken by Wisconsin DNR and its partners to assess the technical assistance needs of various target audiences

### **Contents**

Description of Target Audiences	2
UW-Extension Educators	
Wisconsin DNR Program Staff	
Planners	
Local Decision Makers	
Web Survey of UW-Extension Educators	5
How the Survey Was Designed, Administered, and Scored	
Results and Implications for Technical Assistance Program	
Web Survey of Wisconsin Planners	17
How the Survey Was Designed, Administered, and Scored	
Results and Implications for Technical Assistance Program	
Local Government Association Meeting Participation	20
References and Background Materials	21

### **Description of Target Audiences**

We identified four target audiences for the Wisconsin DNR technical assistance program:

- University of Wisconsin-Extension (UW-Extension) educators,
- Wisconsin DNR program staff,
- Planners (professional and citizen), and
- Local government decision makers.

This section briefly describes each of these audiences.

**UW-Extension Educators** – Through partnerships with 26 University of Wisconsin campuses, counties, tribal governments, and other organizations, the UW-Extension provides a spectrum of lifelong learning opportunities for Wisconsin citizens. The size of the effort is extensive, with more than one million Wisconsin residents participating in outreach programs annually through four divisions: Cooperative Extension, Outreach and E-Learning, Broadcasting and Media Innovations, and Business and Manufacturing Extension. The Wisconsin DNR technical assistance program targets faculty and staff working in the Cooperative Extension division.

Cooperative Extension maintains offices in all 72 Wisconsin counties with educators who specialize in one or more program areas. These educators excel in leadership development, consensus building, and organizational development. University specialists at UW campuses serve as resources to these county educators. High-priority programs focus on economic development, water quality, solid and hazardous waste management and recycling, families and youth at risk, and helping Wisconsin's agricultural industry remain profitable and productive.

### The UW-Extension Mission

"Through the University of Wisconsin-Extension, all Wisconsin people can access university resources and engage in lifelong learning, wherever they live and work."



A central role of UW-Extension professionals is to provide research-based programming, technical expertise, and leadership in response to community needs. Specifically, Cooperative Extension educators deliver education where people live and work – on the farm, in schools and community centers, etc. UW-Extension educators also speak to civic groups and county boards, write newspaper columns, do radio and TV programs, facilitate meetings, and build coalitions to solve community problems. To reach a wider audience – and make it easy for those in remote areas to "attend" programs – Cooperative Extension also uses satellite technology, teleconferencing, and interactive video to link people around the region.

UW-Extension educators come from a variety of backgrounds and have diverse educational and technical experiences. Communities often call upon UW-Extension educators to supply technical expertise in planning and decision-making processes; often, UW-Extension educators serve as the primary point of contact for involved citizens and elected officials. As such, UW-Extension is uniquely suited to play an important role in increasing public understanding of Wisconsin's comprehensive planning ("smart growth") law, the consequences and impacts of development, alternative ways of managing growth, and in building consensus regarding land use solutions appropriate to Wisconsin. Cooperative Extension, in particular, has a long history of being active in public education related to land use planning and natural resource management. It has also been involved in community economic development education.

A variety of available computer tools can assist UW-Extension educators in carrying out UW-Extension's educational programming related to Wisconsin's comprehensive planning law and related land use issues. A separate discussion paper, "Computer Tools and UW-Extension Educational Programming in

Comprehensive Planning" (Appendix A) describes briefly how computer tools relate to accepted principles for UW-Extension involvement in local planning and the roles that county and campus-based faculty can assume in such planning.

**Wisconsin DNR Program Staff** – The Wisconsin DNR is responsible for implementing state laws and, where applicable, federal laws that protect and enhance natural resources. It is the one agency charged with full responsibility for coordinating the many disciplines and programs necessary to provide a clean environment and a full range of outdoor recreational opportunities for Wisconsin citizens and visitors.

Organizationally, the agency is made up of six divisions (see box at right). To carry out the policies of each of the six programs so that the needs of local citizens can be best met, the agency divides the state into five administrative regions (see box below right).

Staff in the Wisconsin DNR's Central Office (located in Madison) work with the Natural Resources Board to establish policies and programs, administer state laws and rules, distribute grants and loans, interact with the Governor, Legislature, other agencies, and interest groups, support DNR field responsibilities, and evaluate progress toward agency goals.

More than two-thirds of Wisconsin DNR's workforce is assigned to field offices in the five regions. Throughout each region, geographically based work teams draw expertise from different disciplines and combine their efforts with county, city, and town leaders, business owners, private homeowners and landowners, outdoor enthusiasts, young people, and other state residents to manage public resources. Regional staff members are responsible for understanding their area's ecology

Air and Waste
Land
Forestry
Water
Customer and Employee Services
Enforcement and Science and Science

DNR Administrative Regions

and identifying local threats to natural resources and the environment. These staff members come from a variety of backgrounds, possess diverse educational and technical experiences, and sometimes have limited experience working with land use or planning issues. Nonetheless, communities often call on these individuals to advise citizens and decision makers about environmental and conservation concerns. Staff members rely upon their technical expertise to provide sound information. Computer tools can expedite and enhance the service that DNR staff members provide the public.

**Planners** – Planners play an essential role in shaping Wisconsin's landscape. They coordinate public and private interests to develop a community vision for the future. Planners help shape the economy, social community, and the environment via the processes they guide and the documents they help create, both of which provide a rational basis for land-use decision making. Planners employ processes that involve defining problems and opportunities, setting goals, generating alternate strategies, choosing appropriate strategies, implementing planned strategies, and evaluating progress toward plan goals. Sound planning has always been an important means of ensuring a community is able to meet its future needs while providing for present quality of life.

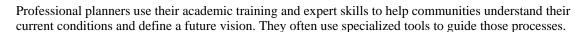
A current emphasis on planning is especially pertinent. In 1999 Wisconsin passed legislation that mandates all local governments who make decisions affecting land use to create and adopt comprehensive plans. The

law sets up a framework for the structure of a comprehensive plan requiring communities to address nine general elements, but does not prescribe any particular policies or principles, sound or otherwise and the state holds no authority over the contents or quality of adopted the plans.

The Wisconsin DNR recognizes the significant long-term impact sound planning can have on preserving and managing a community's natural resources and protecting an area's environmental quality. Computer tools can help effectuate sound planning. Therefore, it is imperative that the Wisconsin DNR technical assistance program target the two groups that effect the planning process most directly, professional planners and citizen planners.

Professional planners typically have academic training in the following aspects of planning:

- Structure and function of cities and regions
- History and theory of planning processes and practices
- Administrative, legal and political aspects of plan making
- Public involvement and dispute resolution techniques
- Research design and data analysis techniques
- Written, oral, and graphic communication skills
- Ethics of professional practice
- Collaborative approaches to problem solving



Citizen planners typically volunteer their time to help influence and guide the future for their communities, and may or may not have planning education or experience. Often, they participate in their town or city planning organization because they are concerned about factors that comprise their quality of life. These commissions advise their local governing body on comprehensive planning and land use issues and may make related decisions that are delegated by the governing body.

**Local Decision Makers** – A wide range of "actors" get involved in local land use decision making. Individual landowners, realtors and developers, investors, local governments, regional planning commissions, tribal governments, and state and federal agencies all play a role in decisions that affect land use. The vast majority of land in Wisconsin is, and will remain, privately owned, however, making individual landowners and developers some of the principal land-use decision makers.

In Wisconsin, the primary administrator of land use *regulation* is local government through its planning and zoning powers. Cities, villages, towns, and counties can adopt comprehensive zoning and land use regulations, although some communities have chosen not to<sup>1</sup>. Community plans can establish guidelines and standards to follow when making long-range, local development decisions, while zoning maps and ordinances designate the types of allowable uses on specific pieces of land. Public planning and zoning processes play an important role in guiding desirable growth, while protecting resources. Decision makers involved in these local processes include elected officials, local government staff members (in a variety of departments like public works, assessor's offices, parks, and solid waste), and appointed advisory bodies.

One particularly important group of local decision makers is a community's zoning board of adjustment. These quasi-judicial bodies apply local ordinances and related state laws to specific development proposals in three general categories: administrative appeals, variances, and special exceptions/conditional uses. People of diverse backgrounds comprise these boards. These may include citizen volunteers with no connection to the planning profession, architects, university professors, business and civic leaders, and neighborhood activists. Past research in Wisconsin demonstrated that these individuals want to make sound decisions that consider environmental consequences.

<sup>&</sup>lt;sup>1</sup> Fifty-seven of Wisconsin's 72 counties have county-wide zoning. Seventy-one percent of Wisconsin towns operate under zoning ordinances, and all but three Wisconsin cities have zoning ordinances.

### **Web Survey of UW-Extension Educators**

In the fall of 2004, the Wisconsin DNR partnered with the University of Wisconsin-Stevens Point's Center for Land Use Education (CLUE) to conduct a web-based survey of University of Wisconsin-Extension educators to determine their interest in computer tools and assess their technical assistance needs. Here, we detail results from this survey and their implications for the Wisconsin DNR technical assistance program.

How the Survey Was Designed, Administered, and Scored - The questionnaire was designed in cooperation with the Center for Land Use Education. The final instrument consisted of 116 questions, twenty-six of which related directly or indirectly to the Wisconsin DNR technical assistance program. The Center for Land Use Education posted the survey instrument on its web site and invited UW-Extension educators to participate via e-mail. An initial invitation, followed by two e-mail reminders, was sent to county-based Community, Natural Resources, and Economic Development (CNRED) agents and watershed-based Basin Educators. Seventy-nine survey e-mail invites were distributed and 36 educators completed the survey. The CLUE staff compiled the data, analyzed and reported results in percentile ranks or number of responses, and provided the results to the Wisconsin DNR. We further analyzed survey responses to determine overall importance and better understand the results. Following the summary and analysis, we discussed results with our technical assistance partners to further elucidate the implications for the technical assistance program.

While 46% represents a respectable response rate, the results of this effort reflect a convenience sample rather than a statistically valid random sample. The relatively high return rate, however, allows us to have confidence regarding the implications of the findings for the Wisconsin DNR technical assistance program.

**Results and Implications for the Technical Assistance Program** – In this section, we present the most relevant survey questions, summarize Extension educator responses, and discuss the relevance of the results to the Wisconsin DNR technical assistance program.

**Question Related to Land Use Planning:** Based on the anticipated needs of your county, how important are the following CNRED program emphases?

- Developing public participation plans?
- Providing incentives to increase long-term community engagement in planning?
- Designing community planning processes?
- Assisting in planning process budget preparation?
- Collecting GIS data?
- Collecting other data?
- Developing an overall community vision?
- Developing plan goals and objectives?
- Proposing alternative future community scenarios?
- Comparing and selecting strategies?
- Assessing the impacts of options using decision-support tools?
- Using GIS data to help groups make decisions?
- Creating action plans?
- Implementing the plan?
- Monitoring and evaluating plan effects?

**Results:** Responses for each CNRED program emphasis were ranked according to importance (i.e. not important, somewhat important, important, or very important). Table 1 summarizes the raw data from the survey responses. For each program emphasis, we combined the two rankings receiving the highest percentile to permit grouping by overall importance. The ranking that received the highest percentile appears first, i.e. "Important to Very Important" shows that the highest ranking for this emphasis is Important and second highest percent returned is Very Important. These combined rankings can be summarized as follows:

### **Important** to Very Important

Assessing the impacts of options using decision-support tools

### **Important** to **Somewhat Important**

Using GIS data to help groups make decisions Proposing alternative future community scenarios

### **Somewhat Important to Important**

Collecting other data Analyzing other data Analyzing GIS data Collecting GIS data

Table 1. Survey results related to CNRED program emphases related to land use planning.

### **Land Use Planning Areas** 90.009 80.00% 70.00% 60.00% 50.00% ■ Not important ■ Somewhat important 40.00% ■ Important ■ Very important 30.00% 20.00% 10.00% 0.00% Arante de para collect Cle page A collect offet data Mary Stander of the states ...r. Dedision action plans indeneurid date scenarios drating plans stratedies goals 'impacts

**Implications:** According to these results, CNRED educators felt the most important emphasis in their land use planning program is the ability to assess impacts of proposed land use changes. This finding reinforces the importance of targeting UW-Extension educators as part of the Wisconsin DNR technical assistance program. Several of the computer-based tools being promoted are impact assessment tools. These results suggest that outreach efforts, publications, and related materials targeted at this audience should focus on these types of tools.

In addition, the mid-range results show that UW-Extension educators are called upon to assist communities with investigating alternative land use scenarios. Tools that give educators the skills and abilities to concretely present future land use scenarios should be highlighted in outreach efforts.

Although the survey results show that UW-Extension educators feel that collecting and analyzing GIS data are among the least important emphases in their land use planning program, the application of GIS data in community decision-making processes remains important. These survey results support earlier Wisconsin DNR findings related to the accessibility and usability of decision support tools (see proceedings of Wisconsin DNR's *Changing Landscapes* workshops), which indicated that the most useful tools have the necessary data (or databases) imbedded within the tool structure (i.e. users do not have to obtain independently data needed to use the tools).

**Question Related to Local Government:** Based on the anticipated needs of your county, how important are the following CNRED program emphases?

• Training for plan commissioners?

training PC

- Training about recruiting and retaining plan commissioners?
- Training for zoning boards of adjustment/appeals?
- Training for citizen planners?

**Results:** Responses for each CNRED program emphasis were ranked according to importance (i.e. not important, somewhat important, important, very important). Table 2, below, summarizes the raw data from this question. For each program emphasis, we combined the two rankings receiving the highest percentile to permit grouping by overall importance. The ranking that received the highest percentile appears first, i.e. "Important to Very Important" shows that the highest ranking for this emphasis is Important and second highest percent returned is Very Important. These combined rankings can be summarized as follows:

### Very Important to Important

Training for plan commissioners Training for citizen planners

training for recruiting PC

**Table 2.** Survey results related to CNRED program emphases related to local government.

# 100% 90% 80% 70% 60% 40% 20% 10%

training BOA

training citizen planners

### **Local Government Training**

**Implications:** These results indicate that using UW-Extension educators can be an effective means to influence local land use planning and decision making. Within the Wisconsin DNR technical assistance program, strong emphasis should be placed on content that will assist educators with fulfilling the needs of local planning commissions. We will need to conduct further research to determine how Extension educators assist planning commissions with their needs in order to adequately shape the content of the Wisconsin DNR technical assistance sessions.

**Question related to Economics of Development:** Based on the anticipated needs of your county, how important are the following CNRED program emphases?

- Cost of community services?
- Economic effects of public lands?
- Financial cost of development?

40%

30%

20%

10%

0%

COCS studies

• Environmental cost of development?

**Results:** Responses for each CNRED program emphasis were ranked according to importance (i.e. not important, somewhat important, important, very important). Table 3, below, summarizes the raw data from this question. For each program emphasis, we combined the two rankings receiving the highest percentile to permit grouping by overall importance. The ranking that received the highest percentile appears first, i.e. "Important to Very Important" shows that the highest ranking for this emphasis is Important and second highest percent returned is Very Important. These combined rankings can be summarized as follows:

### **Important** to **Very Important**

Environmental cost of development

economic effects

**Table 3.** Survey results related to CNRED program emphases related to the economics of development.

## 90% 80% 70% 60% 50% □not important □somewhat important □very important □very important

financial costs

environmental costs

### **Economics of Development**

**Implications:** The survey results show that UW-Extension educators are actively involved with the economic components of proposed land uses. Tools specifically designed to predict environmental impacts of changing land uses should be incorporated into Wisconsin DNR's technical assistance program.

**Question Related to Extension Educational and Training Activities:** What formats do <u>your audiences</u> prefer for receiving education, training or technical assistance?

- Printed materials?
- On-line materials?
- Workshops/conferences?
- Distance education?
- Videos?

**Results:** Table 4 presents the survey responses; respondents ranked each educational format according to importance (1 being the most important – 6 being the least important). We consider the educational formats that received greater than fifty percent 1 and 2 rankings as the most effective educational formats. We consider educational formats that received a substantial percentage of 3 rankings as possible educational formats. Similarly, educational formats that received greater than fifty percent 6, 5, and 4 rankings are considered least effective educational formats. When ranked in this manner, the educational formats can be grouped as follows:

### **Most Effective Educational Formats**

Printed materials

Workshop/Conferences

**Possible Educational Formats**Online materials

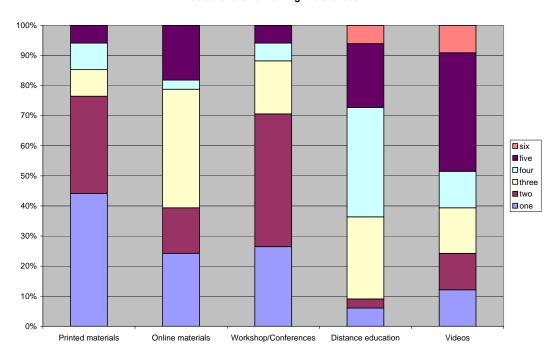
Least Effective Educational Formats

Distance education

Videos

**Table 4.** Survey results related to educational and training preferences.

### **Educational and Training Preferences**



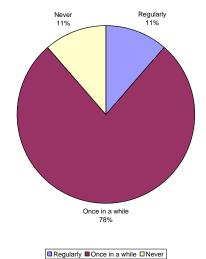
**Implications:** These survey results suggest printed materials and workshop templates and techniques will be the most effective approach for helping UW-Extension educators meet the needs of their audiences. Participation in training sessions can enable Extension educators to replicate the training program at the local level. Educational publications produced for training sessions can be made available to planners and local decision makers through UW-Extension agents. Educational publications produced for the technical assistance program also can be made available online.

**Question Related to Web Resources:** The Center for Land Use Education has a web site. How often do you use the web site? Which types of information are most helpful on the web site?

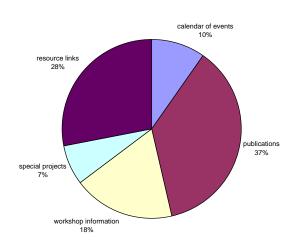
- Calendar of events?
- Publications?
- Workshop information?
- Special projects?
- Resource links?

**Results:** Figure 1 shows that 78 percent of UW-Extension educators surveyed said they use the Center for Land Use Education web site at least occasionally. Figure 2 reveals the types of information educators felt were most helpful to have on the web site. The survey found that Extension educators feel the most useful pages on the CLUE web site are the publications page (37 percent) and resource links page (28 percent).

Figure 1. UW-Extension educator use of CLUE web site



**Figure 2.** Most useful information on CLUE web site.



**Implications:** The CLUE web site can serve as a vehicle for promoting the Wisconsin DNR technical assistance program. The publications page of the CLUE web site contains a library of PDF files related to land use planning. This may be an appropriate location to make information related to computer tools available.

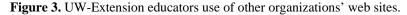
The resource links page of the CLUE web site contains links to other land use related web sites. The links are categorized by the area of land use planning the given site focuses on. Evaluation of developing more of a presence on this list for computer tools should be undertaken.

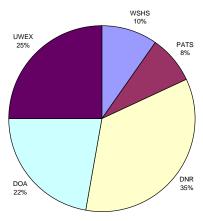
Question: What other organization's web sites do you access for land use information?

- Wisconsin Historical Society?
- PATS?
- DNR?
- DOA?
- UW-Extension web sites?

**Results:** Of those educators surveyed, 35 percent said they access land use information from the Wisconsin DNR website (Figure 3). This represents the largest percentage compared to percentages for the other choices.

**Implications:** The Wisconsin DNR technical assistance program should focus, in part, on maintianing and enhancing the DNR land use/comprehensive planning web site. Efforts should be taken to publize the resources the Wisconsin DNR web site offers to increase its use.





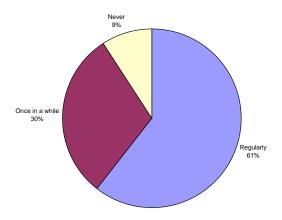
**Question Related to CLUE Newsletter:** The Center for Land Use Education publishes a quarterly newsletter, the *Land Use Tracker*. The newsletter is distributed by e-mail to all CNRED educators and is available online at: <a href="www.uwsp.edu/cnr/landcenter/newsletters.html">www.uwsp.edu/cnr/landcenter/newsletters.html</a>. How often do you read the newsletter?

Which types of information do you prefer to read about in the newsletter?

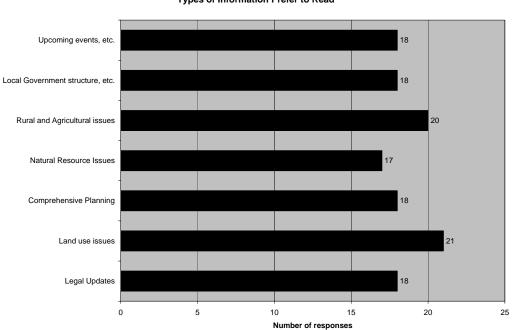
- Legal updates?
- Local or statewide land use issues?
- Comprehensive of land use planning?
- Natural resources issues?
- Rural and agricultural issues?
- Local government structure and function?
- Upcoming events, publications, and other announcements?

**Results:** Sixty-one percent of UW-Extension educators surveyed said they read the *Land Use Tracker* on a regular basis (Figure 4). An additional 30 percent read it at least occasionally. Extension educators expressed a desire to read information on a variety of issues (Table 5).

**Figure 4.** Frequency of reading the *Land Use Tracker* by UW-Extension educators.



**Table 5.** Types of information that UW-Extension educators prefer to read in the *Land Use Tracker*.



### Types of Information Prefer to Read

**Implications:** The *Land Use Tracker* appears to be a valuable resource for advertising and promoting the Wisconsin DNR technical assistance program. Informative articles on computer tools for land use planning and decision making would provide Extension educators with a type of reading material they prefer.

**Question Related to Statewide Specialists:** Of the specialists currently working on land use issues, how would you like to see them spending their time with you?

- Providing educational sessions or training me personally?
- Providing educational sessions or training to local audiences?
- Working on applied research projects?
- Producing fact sheets and other educational material?
- Helping with meeting facilitation?

**Results:** Table 6 presents survey responses for this question; respondents ranked each "time spent" category according to importance (1 being the most important – 6 being the least). We consider the "time spent" categories that received greater than fifty percent 1 and 2 rankings as the most effective ways to spend time with Extension educators. "Time spent" categories that received a substantial percentage of 3 rankings are considered as possible ways to spend time with these educators. Finally, we consider "time spent" categories that received greater than fifty percent 6, 5, and 4 rankings as least effective ways to spend time with Extension educators. When ranked in this manner, the educational formats can be grouped as follows:

### **Most Effective Ways to Spend Time with Agents**

Producing fact sheets and other educational material Providing educational sessions or training to agents personally Providing educational sessions or training to local audiences

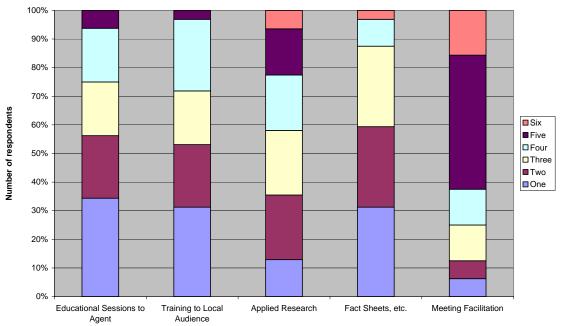
### Possible Ways to Spend Time with Agents

Working on applied research projects

### **Least Effective Ways to Spend Time with Agents**

Helping with meeting facilitation

**Table 6.** Survey results showing preference for how Extension educators would like to see Extension specialists spend their time.



Prioritized with 1 most important

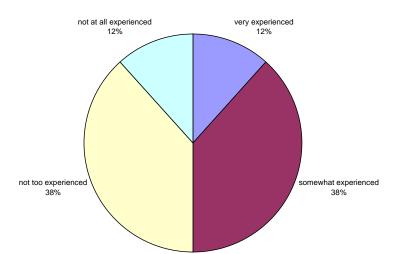
Implications: Since DNR staff members are often viewed as "specialists," the survey results suggest the most effective means for providing technical assistance would be to develop print materials and conduct workshops, both for Extension educators and their local audiences. Fact sheets covering data and mapping tools already have been produced. A fact sheet focusing on modeling tools is under development. With input from target audiences, these publications will be further refined. In addition, other instructional materials (fact sheets, directions for using specific tools, guided activity sheets, etc.) should be developed to address specific technical assistance needs. These survey results also reinforce the two-day training session format already developed with our program partners for providing technical assistance to Extension educators. Future availability of technical assistance to local audiences remains to be addressed.

**Questions Related to Computer Tools:** The DNR with UW-Extension has been involved in a program to identify and evaluate computer-based tools that help users understand the connection between land use decisions and related impacts. Computer-based tools refer to computer programs that integrate a source of information (database) and a method to present or manipulate that information (model base), with a visual display (user interface). To help us understand the best means of delivering information and technical assistance, please answer the questions below.

- How would you categorize your experience with computer-based tools?
- Are others in the county office using computer-based tools?
- Do you have access to technical support for applying computer-based tools?
- How would you categorize your interest in learning about computer-based tools?
- How would you prefer to learn about computer-based tools?
- Is there a particular tool that you are interested in learning about?

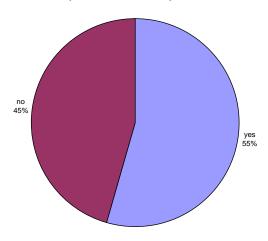
**Results:** Results from these questions show that 50 percent of Extension educators surveyed are not too experienced or have no experience with computer tools (Figure 5). The results (Figure 6), however, show that there is a community of computer tool users within many county offices; fifty-five percent of respondents indicated others in their office regularly use computer tools. In addition, 66 percent of the Extension educators replied that they have access to technical support (Figure 7).

The survey results show that the UW-Extension community has a relatively high level of interest in learning about computer-based tools. The data (Table 7) also suggest that workshops supported by web modules and printed materials will be the most effective means of reaching this target audience. Participants identified a small number of specific tools that they are interested in learning about (Table 8).



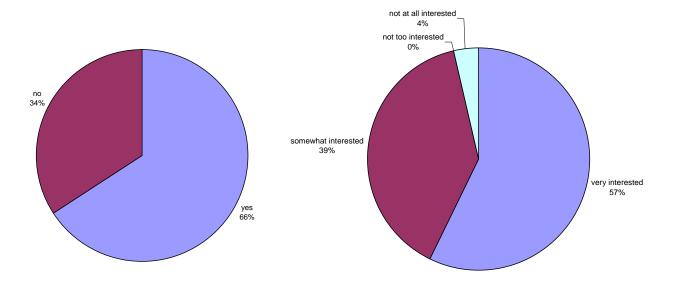
**Figure 5.** Extension educators' experience using computer-based tools.

Figure 6. Use of tools by staff in the county office other than Extension educators.



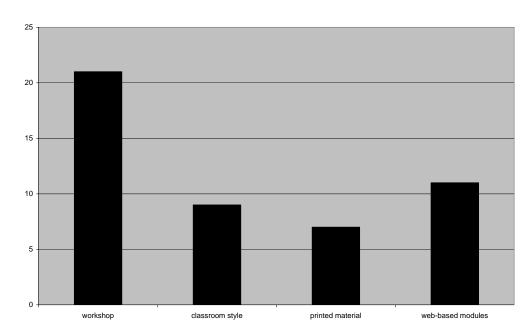
**Figure 7.** Availability of technical support to Extension educators.

**Figure 8.** Interest by Extension educators in learning about computer-based tools.



**Implications:** The high percentage of Extension educators in need of technical training in this area (Figure 5) strengthens the importance of outreach to UW-Extension faculty. Having a network of peers, with similar interests and skill sets, will be important for Extension educators after participating in technical assistance workshops. It appears that such support is available (Figures 6 and 7); the survey results suggest that over half the educators will have an in-house technical support system in place. Future availability of technical support, for those educators without support currently available, remains to be addressed. These data give merit to the efforts and resources required to conduct technical assistance sessions.

The survey results further suggest that the participants' interest and willingness to learn will provide an atmosphere conducive to effective education. Future efforts should be made to provide additional educational opportunities to fill the needs of each learning style. In addition, participants identified a small number of tools that they are interested in learning about (Table 8). These tools can likely be integrated into planned technical assistance efforts.



**Table 7.** Means by which Extension educators prefer to learn about computer-based tools.

**Table 8.** Responses related to specific tools identified by Extension educators.

- Use of ArcView
- GIS Land Use Modeling
- IMPLAN
- More GIS program use training preferably as distance education
- Visual graphics using pop growth and land use development
- I gave this option a lower choice because computer-based tools will not meet the current needs of my local communities - they need to learn and understand planning basics and working more cooperatively.
- CommunityViz 3-D spatial analysis stuff
- What If?
- PlaceIt!

### **Web Survey of Wisconsin Planners**



The Wisconsin Chapter of the American Planning Association (WAPA) conducted a web-based survey of Wisconsin planners in 2003 and 2004 to obtain feedback regarding the services that WAPA provides. Here, we extract results from this survey and discuss their implications for the Wisconsin DNR technical assistance program.

### How the Survey Was Designed, Administered, and

**Scored** – WAPA distributed 783 opinion surveys to Wisconsin's planning community. The sampling frame for this survey was generated from e-mail feedback updating contact information for Wisconsin's planning community. Two e-mails were sent requesting updated contact information: the

first to all those who were members of WAPA at the time, and the second to people in the planning community who were not WAPA members. The second list included people who had attended WAPA and related conferences about planning issues or who work in planning departments for municipalities in Wisconsin, but were not current members of WAPA.

One hundred sixty-five completed surveys were returned and analyzed. While this represents a respectable response rate (21%), the results reflect a convenience sample rather than a statistically valid random sample of the survey population. Nonetheless, the relatively high return rate allows us to have confidence regarding the implications of the findings for the Wisconsin DNR technical assistance program. The WAPA board compiled the data and provided the results to the Wisconsin DNR. WAPA also posted a summary report on its web site: <a href="http://www.wisconsinplanners.org/survey\_results\_2004.htm">http://www.wisconsinplanners.org/survey\_results\_2004.htm</a>.

**Results and Implications for Technical Assistance Program** – In this section, we extract the most relevant survey questions, summarize planner responses, and discuss the relevance of the results to the Wisconsin DNR technical assistance program.

**Results Related to Professional Association Membership:** Of the 165 respondents, 90 percent were members of the national American Planning Association (APA) and 90 percent were WAPA members. Fifty percent of respondents were members of the American Institute of Certified Planners (AICP).

**Implications:** These results suggest that most Wisconsin planners belong to their professional association and that a large percentage of this audience is committed to professional development (i.e. AICP certification). Partnering with WAPA to identify and address training and technical assistance needs could increase the likelihood of achieving a high level of results with this target audience. The national association might be an appropriate partner to work with to expand the reach of Wisconsin's model technical assistance program.

**Results Related to WAPA Conferences:** The survey asked respondents what they thought about the quality of WAPA conferences. Sixty-two percent of respondents felt the conferences provide quality information and 41 percent felt the conferences met their educational needs. Sixty-five percent gave an overall conference rating of "very good" or "excellent." Eighty-one percent of respondents felt the conferences were well organized and 79 percent thought the cost for the conferences is reasonable.

**Implications:** These results suggest that one effective means of reaching planners is through participation in WAPA conferences. Participating in conference planning, plenary, paper, and poster sessions, workshops, seminars, and trade show exhibits could all be effective means of carrying out aspects of the Wisconsin DNR technical assistance program.

**Results Related to WAPA Newsletter:** The survey asked respondents for their opinions regarding WAPA's quarterly newsletter. Sixty-one percent of respondents indicated that they felt the newsletter

provides quality information, and 59 percent felt the newsletter was interesting and informative. Similarly, 66 percent felt the newsletter was well organized and 61 percent said the frequency of the newsletter was adequate.

**Implications:** These results suggest the WAPA newsletter may be an effective tool for promoting the Wisconsin DNR technical assistance program. It may also be an appropriate venue for highlighting case studies and real world examples of the use of computer tools for planning, conservation, and environmental protection.

**Results Related to Newsletter Suggestions:** Survey respondents were asked what suggestions they have for any changes to the WAPA newsletter. Some of the suggestions related to computer tools or relevant to the Wisconsin DNR technical assistance program include:

- have articles with solid recommendations and tools
- add ideas and tips to utilize the technology such as GIS, within planning offices
- identify informational links, resources
- consider detailed study cases
- more how-to sections; case studies
- high technology and planning

**Implications:** These results suggest that newsletter articles that address specific tools and ways that the tools can be used for specific planning efforts might be one way of informing planners about tools and their use for planning, conservation, and environmental protection.

**Results Related to WAPA Listserve and Web Site:** The survey asked respondents about their awareness and use of the WAPA listserve and web site. Overall, 66 percent of respondents indicated they were aware of the WAPA listserve and 40 percent indicated that they subscribe to the listserve. Forty-four percent of respondents found the web site interesting and informative, 46 percent indicated the site provided quality information, and 33 percent found the site well organized and frequently updated. A little more than half of the respondents indicated that they check the web site for news, RFP's, job notices, etc.

Implications: These results suggest the WAPA listserve and web site may be effective tools for promoting aspects of the Wisconsin DNR technical assistance program, including upcoming technical assistance sessions for professional planners. The WAPA listserve also may be an appropriate venue for inquiring about the current use of computer tools for planning, conservation, and environmental protection. Finally, the WAPA web site may be an appropriate vehicle for highlighting case studies and real world examples of the use of computer tools for planning, conservation, and environmental protection.

**Results Related to Conference Topics:** Survey respondents were asked to list any topics they would like to see at future conferences. Some of the suggested topics that could be addressed with sessions focused on computer tools include:

- GIS management
- GIS applications
- environmental vs. development controversies
- characterizing and assessing the quality of the built environment techniques for working with citizens to identify what they like/don't like about their built environment
- fiscal impact analysis
- economic consequences of development regulations
- effectively dealing with anti-planning sentiments
- ways to get the public interested and involved
- public participation training
- public involvement successful efforts, techniques, ways to fund
- Wisconsin's comprehensive planning law resources/approaches for completing the nine elements; more nuts and bolts topics

Some specific environmental topics that were listed include water resource management, open space planning, forest planning, and urban agriculture.

**Implications:** These results suggest Wisconsin planners have an interest in computer tools and related technologies. Several of the interests listed by respondents are consistent with the goals of the Wisconsin DNR technical assistance program and suggest the climate is right for offering technical assistance focused on computer technologies. Conference sessions specifically focused on the use of computer tools for assessing impacts and enhancing public participation could be effective ways of promoting the use of computer tools for planning, conservation, and environmental protection.

**Results Related to Additional Chapter Services:** Survey respondents were asked to list any other services they would like to see WAPA provide. Some suggestions related to computer tools or relevant to the Wisconsin DNR technical assistance program include:

- training workshops on current issues
- sponsor plan commission workshops with UWEX
- specialized training on specific topic; census and demographics analysis; computer applications in planning, etc.
- I would like to see online training
- additional training and/or skills workshops
- partner with others to offer additional training, put more resources on the web site
- skills workshops
- additional training and/or skills workshops
- skills workshop
- help provide planner GIS training at reasonable cost (our employers are not going to pick it up in these tight budget times) with an emphasis on tools like ArcView
- additional training and workshops including 1 day workshops which combine 2 hours web based plus on-site presentations
- skills workshops
- training focusing on skills the how-to approach
- online training with the World Wide Web is growing rapidly; it reduces cost and time

Implications: These results suggest Wisconsin planners have an interest in computer tools and related technologies. Several of the interests listed by respondents are consistent with the goals of the Wisconsin DNR technical assistance program. Conference sessions specifically focused on the use of computer tools for assessing impacts and enhancing public participation could be effective ways of promoting the use of computer tools for planning, conservation, and environmental protection. These results also suggest planners may be interested in web training modules and web casts proposed by the Midwest Spatial Decision Support System Partnership.

### **Local Government Association Meeting Participation**

Program staff attended and exhibited at the annual conferences of the Wisconsin Counties Association (September 27-28, 2004, in Milwaukee) and Wisconsin Towns Association (October 3-4, 2004, in Appleton). Approximately 800 county supervisors and staff attended the Wisconsin Counties Association conference and passed through the exhibit area. During the 2-day conference, we spoke at length about computer tools, their application to county-level processes, and our upcoming technical assistance program with 69 individuals. Twenty-three individuals representing 15 different counties and 8 private firms signed up to receive

additional information about upcoming tool training sessions. The following week, 960 town board members and town residents attended the Wisconsin Towns Association conference. During our one and a half day participation at the Towns Association conference, we spoke at length to 23 individuals about benefits of using computer tools to improve town planning and decision-making, and 10 additional people signed up to learn about future training sessions.

It is important to note two factors about Wisconsin DNR's participation in these events. First and foremost, we have become aware that local officials and citizen planners are notoriously hard to reach via other forums. While we had in-depth contact with only a small percentage of participants at each conference, it is likely one of the only opportunities to do so during the year. Secondly, it was not our intention to participate in these conferences as a technology transfer effort; rather, our participation provides visibility for both Wisconsin DNR's technical assistance program as well as the tools themselves and allows us to more fully assess the needs of our target audiences. We used these opportunities to ascertain, through our in-depth discussions with participants, environmental issues that are of concern in different areas of the state. For example we learned that navigable waters and wetland issues are important to northern residents, and learned that access to information about contaminated lands is important to residents in many areas of the state. This provides some direction for focusing and marketing our workshops. It also provides the basis for developing more detailed scripts for ethnographic interviews for these target audiences.

### **References and Background Materials**

- Caffarella, R.S. 2002. *Planning Programs for Adult Learners: A Practical Guide for Educators, Trainers, and Staff Developers, 2<sup>nd</sup> ed.* San Francisco: Jossey-Bass.
- Emmer, R.E. 1994. You need to go to local governments because they won't come to you. Pp. 84-89 <u>In</u> Kusler, J. and L. Krantz (eds.). *Improving Wetland Public Outreach, Training and Education, and Interpretation: A Collection of Papers*. Berne, NY: Association of State Wetland Managers.
- Paddock, S.C. 1997. The changing world of Wisconsin local government. Pp. 101-172 <u>In</u> State of Wisconsin 1997-1998 Blue Book. Wisconsin Legislative Reference Bureau, Madison.
- Richey, R. 1992. Designing Instruction for the Adult Learner. London: Krogan Page.
- Stone, B. and S. Coppernoll. 2004. You, Extension and success: a competency-based professional development system. *Journal of Extension* 42(2).
- University of Wisconsin-Extension. 2004a. *Introduction to University of Wisconsin-Extension*. Available on the web at: http://www.uwex.edu/about/. Accessed October 2004.
- University of Wisconsin-Extension. 2004b. *Extension Administrative Leadership Program*. Available on the web at: http://www.uwex.edu/ealp/. Accessed December 2004.
- University of Wisconsin-Extension. 2004c. *University of Wisconsin-Extension Annual Report*, 2004. University of Wisconsin-Extension, Madison. 4pp.
- Wisconsin Chapter, American Planning Association. 2004. 2003-04 WAPA Survey Results. Available on the web at: http://www.wisconsinplanners.org/Survey\_Results\_2004.pdf. Accessed October 2004.
- Wisconsin Chapter, American Planning Association. 2004. WAPA Chapter Plan, 2003. Available on the web at: http://www.wisconsinplanners.org/2003\_strategic\_plan.htm. Accessed November 2004.
- Wisconsin Counties Association. 2004. Web site: <a href="http://www.wicounties.org/">http://www.wicounties.org/</a>. Accessed October 2004, November 2004.
- Wisconsin Department of Natural Resources. 2003. Changing Landscapes 1: Proceedings of a workshop to review and provide expert opinion on the usefulness of impact assessment tools. March 31-April 1, 2003. Wisconsin Department of Natural Resources, Madison. Available on the web at: <a href="http://dnr.wi.gov/org/es/science/landuse/Changing\_Landscapes/index.htm">http://dnr.wi.gov/org/es/science/landuse/Changing\_Landscapes/index.htm</a>.
- Wisconsin Department of Natural Resources. 2004. *Changing Landscapes 2: Proceedings of a workshop to review and provide expert opinion on the usefulness of impact assessment tools*. January 22-23, 2004. Wisconsin Department of Natural Resources, Madison. Available on the web at: <a href="http://dnr.wi.gov/org/es/science/landuse/Changing Landscapes/index.htm">http://dnr.wi.gov/org/es/science/landuse/Changing Landscapes/index.htm</a>.
- Wisconsin Towns Association. 2004. Web site: <a href="http://www.wisctowns.com/">http://www.wisctowns.com/</a>. Accessed October 2004, November 2004.